In the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1. A computer implemented method of clipping a subject polygon by a clip polygon and forming trapezoids filling the clipped area comprising the steps of:

(1) representing the subject polygon and the clip polygon each as a set of edges, each edge represented by minimum Y coordinate, a minimum X coordinate, a maximum Y coordinate and a slope;

(2) sorting said subject polygon set of edges and said clip polygon set of edges in increasing values of minimum Y coordinate and storing said sorted set of edges as an array of edges;

(3) determining the greatest minimum Y coordinate of a first edge entry in said subject polygon set of edges and a first edge entry in said clip polygon set of edges, thereby determining a bottom Y coordinate of a next trapezoid to be formed;

(4) detecting all intersections between edges;

(5) forming trapezoids for all areas within both said subject polygon and said clip polygon between successive pairs in the direction perpendicular to the scan line dimension of all edge ends and edge intersections between said greatest minimum Y coordinate of said subject polygon edges and said clip polygon edges and a smallest maximum Y coordinate of said subject polygon and said clip polygon edges.

Claims 2 to 10 (Canceled)